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Chemical Composition Biological Value and Healing Properties of Rosehips

Gulchexra Salavatovna Meliboyeva

Senior Lecturer Department of Chemistry,
Kokand State Pedagogical Institute, Uzbekistan

ABSTRACT

Rosehip is not only a beautiful, but also a useful plant, the healing power of which is not only in its fruit, but also in its pulp, skin and seeds. Rosehip has a hematopoietic effect, increases the body's resistance to harmful environmental influences, accelerates the healing of wounds and bone fusion, normalizes the functioning of the gallbladder and liver, perfectly fights against spring beriberi and exhaustion. The article provides information about the chemical composition, biological value and medicinal properties of wild rose, as well as recommendations for its use.

KEYWORDS: *Wild Rose, rosehip, fruits, vitamins, rosehip oil, hypertension, gastrointestinal diseases, gout, pancreatitis, rheumatism, healing properties of wild rose*

INTRODUCTION

Rose hips are not only beautiful flowers. Rose hips contain many nutrients that positively affect important processes in the body.

"Wild Rose" - this is what the people call rose hips - an unpretentious bush that grows on the slopes of mountains, in forests and river valleys. Although closely related to the queen of flowers - the park rose, it does not have such an attractive appearance, but it has a lot of health benefits.

MATERIALS AND METHODS

Rosehip (Rosa majalis) belongs to the evergreen shrubs of the Rosaceae family. More than 100 species of this plant are officially recognized, among which there are both cultivated and wild varieties, and some grow only in a certain area (are endemic). Of the most famous varieties of fruit plants - wild rose cinnamon, wrinkled, Dahurian and gray, all other species originated from them.

The birthplace of rose hips is Chile, from where it has spread throughout the world due to its nutritional, healing and aesthetic properties. The wild rose has a pleasant scent, recognizable by its characteristic five-petalled pale pink flowers and sharp thorns on the shoots and stems. Valuable orange-red fruits measuring about 3 cm in length have an oval shape and a hard indehiscent pericarp. These are the so-called many nuts, inside of which there is a juicy pulp of sweet and sour taste and hairy seeds. Depending on the size of the fruit, rose hips are distinguished with large fruits (from 4 g) and dense skin, as well as thin-skinned ones with small fruits.

The period of fruit ripening is from August to October, sometimes they are harvested earlier or later, but always before the onset of cold weather, until the berries crumble and freeze. In their raw form, they are not consumed or frozen, since at low temperatures the medicinal properties of the plant are completely lost.

This medicinal plant has long been used in folk medicine, due to the great health benefits due to its specific chemical composition.

Numerous studies have shown that the fruits, pulp, peel and seeds of rose hips contain carbohydrates (16%), represented by glucose, sucrose and fructose, proteins (1.74%), lipids (1.04%), and dietary fiber (54%) and water (2.2%). Of the acids, most of all are malic and citric (3.3%), as well as a lot of the most useful pectin (up to 25%). Calorie content is 109 kcal (per 100 g).

Wild rose berries have high biological activity and healing properties. In terms of the quantitative content and variety of vitamins and useful nutrients, they are significantly superior to other plants.

Vitamin C. Moreover, ascorbic acid is also found in the leaves and even in the roots of the plant. Its content depends on the illumination and the habitat of the bush. For example, rose hips growing in the mountains accumulate more vitamin C than those growing in the plains

In addition to vitamin C, wild rose fruits contain the following micronutrients:

- Vitamins B1, B2 - take part in protein and carbohydrate metabolism, are responsible for the health of mucous membranes, skin and hair
- Vitamin PP (B3) - necessary for better absorption of vitamin C, cellular respiration, the work of the cardiovascular system
- Vitamin E - an antioxidant, stimulates the synthesis of hemoglobin, proteins, is necessary for the absorption of vitamin A, prevents aging
- Vitamin A (most of all β-carotene and lycopene) - an antioxidant, necessary for tissue growth, the health of the organs of vision, and immunity

- Vitamin K - contributes to normal blood clotting, bone mineralization, participates in the formation of ATP - an energy supplier for biochemical reactions.

Macro and microelement composition of wild rose is represented by zinc, manganese, calcium, potassium, iron, phosphorus, magnesium, sodium, molybdenum and copper. In addition, it contains pectin, nitrogenous and tannins, phytosterols (7 fractions with a predominance of β-phytosterol), lycopene, ruby xanthine, pentosan, as well as flavonoids and essential oils.

The leaves, in addition to vitamin C, contain ellagic acid, phytoncides, tannins and a lot of chlorophyll. The roots and bark of the plant are receptacles for substances of the pyro catechin and pyrogallic groups, phytoncides, sugar, ascorbic acid and coloring pigments.

The fatty acids that can be extracted from the flower of a plant by cold pressing are represented by the following variety:

unsaturated: linolenic (23.3-33.9%), linoleic (19.7-45.8%), oleic (6.4-19.2%)

saturated fatty acids (such as natural tretinoin)

essential fatty acids Omega 3, 6 and 9

These nutrients have a high astringency, are responsible for the regeneration and growth of cell tissues, and are beneficial for the cardiovascular and immune systems.

Vitamins and trace elements of wild rose are useful for joints and cartilage tissues. With arthritis, arthrosis and other diseases of the skeletal system, rosehip accelerates the recovery process with complex treatment. Rosehip improves kidney function, removes excess fluid from the body, reduces swelling, and prevents stagnant processes.

Rosehip enjoyed healing fame in the old days. In the Middle Ages, medicines and oils were made on its basis, which were valued at the level of jewelry and furs. Rosehip teas, infusions and decoctions were used to treat gastrointestinal diseases, gout, pancreatitis, rheumatism, lesions of the bone and articular structure of the human skeleton.

Today, scientists have established the following medicinal properties of wild roses:

- increases the body's resistance to infections
- has an anti-inflammatory effect
- removes toxins
- enhances digestion
- stimulates urination (natural diuretic)
- improves cardiovascular activity
- stabilizes blood pressure
- normalizes blood sugar and cholesterol levels
- helps the body absorb iron from food
- has a wound healing and regenerating effect
- slows down the aging process.

Rosehip oil is a popular remedy in dermatology and cosmetics, used to treat wounds, burns and other damage to the epidermis, as well as to reduce wrinkles.

This product is rich in ascorbic acid, phenolic compounds, essential fatty acids, therefore it has a moisturizing effect, prevents peeling and irritation of the skin, keeps it hydrated and balanced, and improves the protective barrier.

Rosehip oil is useful for acne, superficial papules. Thanks to linolenic acid, it helps regulate sebum production, thereby preventing the appearance of blackheads, clogged pores and non-inflammatory acne.

In folk medicine, all parts of the plant are used, not just the berries. Jam is made from the petals, which helps as a sedative. The ground seeds are mixed with alum and applied to wounds for quick healing. From the burnt branches of the wild rose, a resinous substance is obtained, which is effective against psoriasis. Boiled branches and leaves are used to treat dysentery, stomach pain, scarlet fever and pulmonary tuberculosis.

Rosehip products are ingredients in many dermato-cosmetics and cosmetology products: shampoos, creams, lotions, serums and masks. Rosehip oil was considered an effective anti-aging agent. Rich in vitamin A, rose hips provide elasticity to the skin, help clear acne, reduce pigmentation, smooth scars, increase collagen levels, and slow down aging. Wild rose seeds are high in gamma-linolenic acid (GLA), which brightens the skin, reduces sunburn, and prevents loss of hydration.

RESULTS AND DISCUSSION

Here are some useful recipes prepared from wild rose in folk medicine

Rosehip decoction. A useful decoction can be prepared from fresh or dried fruits.

Dry berry recipe. Crush 100 g of dry fruits, rinse to remove hairs, pour 1 liter of water. Then you need to bring to a boil, boil for 5 minutes and leave to infuse for 2.5 hours. Ready broth strain and you can drink.

Fresh berry recipe. Clean fresh fruits from hairs and seeds, rinse, place in an enamel bowl. Close the lid, add water, bring to a boil and boil for 2 minutes. Then the broth is insisted for 3 hours, filtered through 2-3 layers of gauze and drunk. Dosage: per 2 tsp berries take 2 cups of water.

Decoction for weight loss 2 tbsp. grind spoons of fruit, add 500 ml of water, close the lid, bring to a boil, cook for 15 minutes. Leave to infuse for 2 hours. The course of admission is 3 weeks. The decoction is consumed one hour before a meal without sugar.

Infusion from arthrosis Pour 20 g of crushed fruits with 500 ml of boiling water, leave for 8 hours in a thermos. Then strain through gauze and drink 200-250 g before meals in the morning and evening. Take 1 month, then 1 month - a break.

Rosehip can be used as a safe and effective remedy for weight loss. Firstly, it is a low-calorie product, and secondly, it contains substances that speed up metabolism, burn fat, remove toxins and activate fat metabolism.

Potassium in the composition normalizes the water-salt balance of the body, facilitating the release of excess fluid. In addition, due to the large amount of pectin's, rosehip helps to improve the functioning of the intestines, remove toxins and reduce the feeling of hunger.

CONCLUSION

So, rose hips are very useful for our body. Therefore, constantly use rose hips, do not lose its sweet taste and healing properties. Take care of yourself and be attentive to your health.

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